



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------------|------------------|
| 10/777,035 | 02/13/2004 | Hitoshi Mizutani | 118667 | 3902 |
| 25944 | 7590 | 11/01/2005 | | |
| OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | EXAMINER SEMBER, THOMAS M | |
| | | | ART UNIT 2875 | PAPER NUMBER |

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/777,035 | Applicant(s) MIZUTANI ET AL. | |
| | Examiner Thomas M. Sember | Art Unit 2875 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5 and 7-8 is/are rejected.
- 7) ☐ Claim(s) 2,4 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The abstract of the disclosure is objected to because it is a run-on sentence. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

((e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3 and 7-8 are rejected under 35 U.S.C. 102(e) as being anticipated by WO 03/048821 (particularly figure 20). EP1103759 (particularly figure 20) discloses a spread illuminating apparatus comprising at least one spot-like light source 86; and a light conductive plate 84 formed of a substantially transparent material, and adapted to allow light emitted from the at least one spot-like light source and introduced there into to exit out from one major surface thereof, the light conductive plate being shaped into a

Art Unit: 2875

polygon which has two sides thereof substantially parallel to each other, includes, as a part thereof, at least of a triangle having its base defined by an imaginary line (see figure 20) connecting respective straightly opposing ends of the two parallel sides. As broadly claimed, a spot-like light source is disposed at a side 88 thereof constituting one of two hypotenuses of the triangle.

Regarding claim 3, as broadly claimed, the spot-like light source is disposed so as not to protrude beyond an extended line (the extended line can be anywhere between the opposing sides) of one side of the two parallel sides of the polygon adjacent to the side having the spot-like light source.

Regarding claim 7, the light conductive plate has a light scattering pattern formed on at least one major surface thereof (for example, see figure 10).

Regarding claim 8, the light scattering pattern comprises a plurality of pattern elements staggeringly disposed in a lattice-like arrangement.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 5 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0962694 (particularly figure 1). EP 0962694 (particularly figure 1) discloses a spread illuminating apparatus comprising at least one spot-like light source 13; and a

Art Unit: 2875

light conductive plate 12 formed of a substantially transparent material, and adapted to allow light emitted from the at least one spot-like light source and introduced there into to exit out from one major surface thereof, the light conductive plate being shaped into a polygon which has two sides thereof substantially parallel to each other, includes, as a part thereof, at least of a triangle having its base defined by an imaginary line connecting respective straightly opposing ends of the two parallel sides. As broadly claimed, a spot-like light source is disposed at a side 13 thereof constituting one of two hypotenuses of the triangle.

Regarding claim 3, as broadly claimed, the spot-like light source is disposed so as not to protrude beyond an extended line (the extended line can be anywhere between the opposing sides) of one side of the two parallel sides of the polygon adjacent to the side having the spot-like light source.

Regarding claim 5, the polygon is a pentagon (see figure 1, plate 12 has 5 sides) including, as a part thereof, one triangle which has its base defined by an imaginary line connecting respective straightly opposing ends of the two parallel sides.

Regarding claim 7, the light conductive plate has a light scattering pattern formed on at least one major surface thereof (for example, see figures 1, 2 and 6).

Regarding claim 8, the light scattering pattern comprises a plurality of pattern elements staggeringly disposed in a lattice-like arrangement.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, 5 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 1103759 (particularly figure 2a). EP 1103759 (particularly figure 2a) discloses a spread illuminating apparatus comprising at least one spot-like light source 1; and a light conductive plate 10 formed of a substantially transparent material, and adapted to allow light emitted from the at least one spot-like light source and introduced there into to exit out from one major surface thereof, the light conductive plate being shaped into a polygon which has two sides thereof substantially parallel to each other, includes, as a part thereof, at least of a triangle having its base defined by an imaginary line connecting respective straightly opposing ends of the two parallel sides. As broadly claimed, a spot-like light source is disposed at a side thereof constituting one of two hypotenuses of the triangle.

Regarding claim 3, as broadly claimed, the spot-like light source is disposed so as not to protrude beyond an extended line (the extended line can be anywhere between the opposing sides) of one side of the two parallel sides of the polygon adjacent to the side having the spot-like light source.

Regarding claim 5, the polygon is a pentagon (see figure 2a, plate 12 has 5 sides) including, as a part thereof, one triangle which has its base defined by an imaginary line connecting respective straightly opposing ends of the two parallel sides.

Regarding claim 7, the light conductive plate has a light scattering pattern formed on at least one major surface thereof.

Regarding claim 8, the light scattering pattern comprises a plurality of pattern elements staggeringly disposed in a lattice-like arrangement.

Allowable Subject Matter

7. Claims 2, 4 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nowak and Toyoda disclose light emitting devices similar to applicant's invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Sember whose telephone number is 571-272-2381. The examiner can normally be reached on M-F 8 A.M- 5.30 p.m. first Fridays off.

Art Unit: 2875

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas M Sember
Primary Examiner
Art Unit 2875
